

ABSTRACT

The present invention relates to a method for acyltransferase reaction in which an acyl group of acyl coenzyme A is transferred to an acyl group receptor characterized in that the reaction is carried out by production and/or reproduction of acyl coenzyme A from coenzyme A in a reaction system by a chemical thioester exchange reaction with acylthioester. The present invention, wherein expensive acyl CoA is reproduced nonenzymatically in a reaction system, enables to continuously carry out acyltransferase reaction only by putting a small amount of acyl CoA with a donor and a receptor of an acyl group into a system. Accordingly, the method of the present invention can be applied to an industrial production method of various kinds of compounds including useful biological molecules and synthesis of polymers such as polyester.